

## ATA COMMAND TABLE (in Alphabetic Order)

<b>ATA Command</b>	<b>Instruction</b>		<b>OP</b>
ADD LAB(S) TO NV CACHE PINNED SET	AddPinSet		B6h
CFA ERASE SECTORS	CfaEraseSec	CFES	C0h
CFA FORMAT SECTORS	CfafmtTrk	CFFT	50h
CFA KEY MANAGEMENT CHANGE KEY MANAGEMENT VALUE	CfaKeyChange	CFKC	B9h
CFA KEY MANAGEMENT READ KEYING MATERIAL	CfaRdKey	CFRK	B9h
CFA KEY MANAGEMENT STRUCTURE READ	CfaStRead	CFSR	B9h
CFA REQUEST EXTENDED ERROR	CfaReqErr	CFRE	03h
CFA TRANSLATE SECTOR	CfaTransSec	CFTS	87h
CFA WEAR LEVEL	CfaWearLevel	CFWL	F5h
CFA WRITE MULTIPLE WITHOUT ERASE	CfaWrMul	CFWM	CDh
CFA WRITE SECTOR(S) WITHOUT ERASE	CfaWrSec	CFWS	38h
CFA WRITE VERIFY	CfaWrVerify	CFWV	3Ch
CHECK MEDIA CARD TYPE	ChkMedType	CHMT	D1h
CHECK POWER MODE	ChkPwrMode	CKPW	CHPW
CHS2LBA	CHS2LBA		
CONFIGURE STREAM	CfgStr	CFST	51h
DATA SET MANAGEMENT	ATA_DSM	DSM	06h
DEVICE CONFIGURATION FREEZE LOCK	DevCfgFrzLock	DCOF	DCFL
DEVICE CONFIGURATION IDENTIFY	DevCgfdfy DevCgfdfy_DMA	DCOI DCOI_DMA	DCFI DCFI_DMA
DEVICE CONFIGURATION RESTORE	DevCfgRestore	DCOR	DEFR
DEVICE CONFIGURATION SET	DevCfgSet DevCfgSet_DMA	DCOS DCOS_DMA	DCFS DCFS_DMA
DEVICE RESET	DevRst	DRST	08h
DOWNLOAD	Download	DNLD	92h 93h
DOWNLOAD MICROCODE	DnldMCode DnldMCode_DMA		92h 93h
EXECUTE DEVICE DIAGNOSTIC	Diagnose	DIAG	90h
FLUSH CACHE	FlushCache	FLSH	E7h
FLUSH CACHE EXT	FlushCacheEx	FLSE	FLEX
FLUSH NV CACHE	FlushNV		B6h
GET MEDIA STATUS	GetMedStatus	GTMS	DAh
IDENTIFY DEVICE	Identify	IDFY	ECh
IDENTIFY PACKET DEVICE	IdfyPktDev	IDPD	A1h
IDLE		IDLE	E3h
IDLE IMMEDIATE	IdleIm	IDL	E1h
IDLE IMMEDIATE WITH UNLOAD	IdleIm_Unload	IDL_U	E1h
INITIALIZE DEVICE PARAMETERS	InitDevPara	SETP	91h
LBA2CHS	LBA2CHS		
MEDIA EJECT	MedEject	EJCT	EDh
MEDIA LOCK	MedLock	LOCK	DEh
MEDIA UNLOCK	MedUnlock	UNLK	DFh
NCQ ABORT	NCQ_Abort		63h
NCQ ABORT ALL	NCQ_Abort_All		63h
NCQ ABORT NSTRM	NCQ_Abort_NStrm		63h
NCQ ABORT SEL	NCQ_Abort_SEL		63h
NCQ ABORT STRM	NCQ_Abort_Strm		63h

<b>ATA Command</b>	<b>Instruction</b>		<b>OP</b>	
NCQ DATA SET MANAGEMENT	NCQ_DSM		64h	
NCQ DEADLINE	NCQ_Deadline		63h	
NCQ QUEUE MANAGEMENT	NCQ_QMgmt		63h	
NOP	NOP		00h	
QUERY NV CACHE MISSES	QueryMiss		B6h	
QUERY NV CACHE PINNED SET	QueryPinSet		B6h	
READ BUFFER	Rdbuf	RBUF	E4h	
READ BUFFER DMA	Rdbuf_DMA	RBUF_DMA	E9h	
READ DMA	RdDMA	RDMA	C8h	
READ DMA EXT	RdDMAEx	RDMX	25h	
READ DMA QUEUED	RdDMAQ	RDMQ	C7h	
READ DMA QUEUED EXT	RdDMAQEx	RDQX	26h	
READ DMA WITHOUT RETRIES	RdDMAN	RDMAN	C9h	
READ FPDMA QUEUED	RFPDMAQ	RDMA_NCQ	60h	
READ LOG DMA EXT	RdLogEx_DMA	RLEX_DMA	47h	
READ LOG EXT	RdLogEx	RLEX	2Fh	
READ LOG EXT COMPREHENSIVE	RdLogExComp	RLEC	2Fh	
READ LOG EXT CURRENT DEVICE INTERNAL STATUS	RdLogExCurSts	RLECURSTS	2Fh	
READ LOG EXT DEVICE STATISTICS	RdLogExDevSt	RLEDEVST	2Fh	
READ LOG EXT DIRECTORY	RdLogExDir	RLED	2Fh	
READ LOG EXT EXTENDED POWER CONDITION	RdLogExEPC	RLEEPC	2Fh	
READ LOG EXT LBA STATUS	RdLogExLBASTs	RLELBASTS	2Fh	
READ LOG EXT LONG PHYSICAL SECTOR	RdLogExLPS	RLELPS	2Fh	
READ LOG EXT NCQ COMMAND ERROR	RdLogExQEErr	RLEQERR	2Fh	
READ LOG EXT NCQ SEND RECEIVE	RdLogExQSR	RLEQMSR	2Fh	
READ LOG EXT SATA NCQ QUEUE MANAGEMENT	RdLogExQMgt	RLEQMGT	2Fh	
READ LOG EXT SAVED DEVICE INTERNAL STATUS	RdLogExSavSts	RLESAVSTS	2Fh	
READ LOG EXT SELF TEST	RdLogExSelfTest	RLET	2Fh	
READ LONG	RdLong	RDLG	22h	
READ LONG WITHOUT RETRIES	RdLongN	RLN	RDLGN	23h
READ MULTIPLE	RdMul	RMUL	C4h	
READ MULTIPLE EXT	RdMulEx	RDME	RMEX	29h
READ NATIVE MAX ADDRESS	RdNativeMax	RNMA	F8h	
READ NATIVE MAX ADDRESS EXT	RdNativeMaxEx	RNME	27h	
READ SECTOR(S)	RdSec	RDSK RSEC	RS	20h
READ SECTOR(S) EXT	RdSecEx	RDSE	RSEX	24h
READ SECTOR(S) WITHOUT RETRIES	RdSecN	RDSKN RSECN	RSN	21h
READ STREAM DMA EXT	RdStrDMA	RSTD		2Ah
READ STREAM ERROR LOG	RdStrErrLog	RSTE		2Fh
READ STREAM EXT	RdStrPIO	RSTP		2Bh
READ STREAM PERFORMANCE LOG	RdStrPfmLog	RPFM		2Fh
READ VERIFY SECTOR(S)	RdVfy	RVFY	RV	40h
READ VERIFY SECTOR(S) EXT	RdVfyEx	RVFE		42h
READ VERIFY SECTOR(S) WITHOUT RETRIES	RdVfyN	RVFYN	RVN	41h
RECEIVE FPDMA QUEUED	NCQ_Receive	NCQ_RCV		65h

<b>ATA Command</b>	<b>Instruction</b>			<b>OP</b>
REMOVE LAB(S) FROM NV CACHE PINNED SET	RmvPinSet			B6h
REQUEST SENSE DATA EXT	REQS_ATA			0Bh
RETURN NV CACHE POWER MODE	RtnPwrMode			B6h
SANITIZE DEVICE –BLOCK ERASE EXT	SNTZ_Erase			B4h
SANITIZE DEVICE – CRYPTO SCRAMBLE EXT	SNTZ_Crypto			B4h
SANITIZE DEVICE – FREEZE LOCK EXT	SNTZ_FrzLock			B4h
SANITIZE DEVICE – OVERWRITE EXT	SNTZ_OVWR			B4h
SANITIZE DEVICE – STATUS EXT	SNTZ_Status			B4h
SCT LBA SEGMENT ACCESS	SCT_LSA SCT_LSAP_GPL	SCT_LSA SCT_LSAP		
SCT READ LONG	SCT_RL_GPL	SCT_RL		
SCT RETURN ERROR RECOVERY CONTROL	SCT_RERC_GPL	SCT_RERC		
SCT RETURN FEATURE CONTRLL	SCT_RFC_GPL	SCT_RFC		
SCT RETURN FEATURE OPTION FLAG	SCT_RFOF_GPL	SCT_RFOF		
SCT RETURN SCT DATA TABLE	SCT_DT_GPL	SCT_DT		
SCT SET ERROR RECOVERY CCONTROL	SCT_SERC_GPL	SCT_SERC		
SCT SET FEATURE CONTRLL	SCT_SFC_GPL	SCT_SFC		
SCT STATUS REQUEST	SCT_REQST_GPL	SCT_REQST		
SCT WRITE LONG	SCT_WL_GPL	SCT_WL		
SCT WRITE SAME WITH WRITE DATA BLOCK	SCT_WRSAME_BLK_GPL	SCT_WRS AME_BLK		
SCT WRITE SAME WITH WRITE DATA BLOCK FOREGROUND	SCT_WRSAME_BLK_FRG_GPL	SCT_WRS AME_BLK _FRG		
SCT WRITE SAME WITH WRITE DATA PATTERN	SCT_WRSAME_PTN_GPL	SCT_WRS AME_PTN		
SCT WRITE SAME WITH WRITE DATA PATTERN FOREGROUND	SCT_WRSAME_PTN_GPL_FRG	SCT_WRS AME_PTN _FRG		
SECURITY DISABLE PASSWORD	SecuDisPsw	SEDP		F6h
SECURITY ERASE PREPARE	SecuErasePrep	SERP		F3h
SECURITY ERASE UNIT	SecuEraseUnit	SEEU		F4h
SECURITY FREEZE LOCK	SecuFrzLock	SFZL		F5h
SECURITY SET PASSWORD	SecuSetPsw	SESP		F1h
SECURITY UNLOCK	SecuUnlock	SEUL		F2h
SEEK	SEEK			70h
SEND FPDMA QUEUED	NCQ_Send			65h
SERVICE	Service	SRVC		A2h
SET FEATURES	SetFeature	SETF		EFh
SET MAX ADDRESS	SetMaxAddr	SMXA	SMAX	F9h
SET MAX ADDRESS EXT	SetMaxEx	SAME		37h
SET MAX FREEZE LOCK	SetMaxFrzLock	SMFL		F9h
SET MAX LOCK	SetMaxLock	SMLK		F9h
SET MAX SET PASSWORD	SetMaxSetPswd SetMaxSetPswd_DMA	SMAP SMSP_DMA		F9h
SET MAX UNLOCK	SetMaxUnlock SetMaxUnlock_DMA	SMUN SMUN_DMA		F9h
SET MULTIPLE MODE	SetMul	SMUL		C6h
SET NV CACHE POWER MODE	SetPwrMode			B6h
SLEEP	Sleep	SLEP		E6h
SMART DISABLE OPERATIONS	SmDisable	SDSO	SMDI	B0h
SMART ENABLE OPERATION	SmEnable	SESO	SMEN	B0h
SMART ENABLE/DISABLE AUTO OFFLINE	SmAutoOffline	SAOL		B0h

<b>ATA Command</b>	<b>Instruction</b>			<b>OP</b>
SMART ENABLE/DISABLE AUTOSAVE	SmAutoSv	SAAS	SMAS	B0h
SMART EXECUTE OFFLINE IMMEDIATE	ExeSmOI	SEOI	SMOI	B0h
SMART READ ATTRIBUTE THRESHOLDS	SmRdAtbThd	SRAT		B0h
SMART READ DATA	SmRdData	SMRD		B0h
SMART READ LOG	SmRdLog	SRLS	SMRL	B0h
SMART READ LOG COMPREHENSIVE	SmRdLogComp	SMRC		B0h
SMART READ LOG DEVICE STATISTICS	SmRdLogDevSt	SMRDEVS T		B0h
SMART READ LOG DIRECTORY	SmRdLogDir	SMLD		B0h
SMART READ LOG LOGICAL PHYSICAL SECTOR	SmRdLogLPS	SMRLPS		B0h
SMART READ LOG SECTOR IDENTIFY DEVICE	SmRdLogIDFY	SMRIDFY		B0h
SMART READ LOG SECTOR SELECTIVE SELF TEST	SmRdLogSelect	SMRSEL		B0h
SMART READ LOG SELF TEST	SmRdLogSelfTest	SMRT		B0h
SMART READ LOG SUMMARY	SmRdLogSum	SMRS		B0h
SMART RETURN STATUS	SmStatus	SRSS		B0h
SMART SAVE ATTRIBUTE VALUES	SmSvAtb	SSAV		B0h
SMART WRITE LOG	SmWrLog	SWLS	SMWL	B0h
SOFTWARE RESET	Reset	REST	SRST	
STANDBY	Standby	STBY		E2h
STANDBY IMMEDIATE	StandbyIm	STBI		E0h
TRUSTED NODAT RECEIVE	TCG_Receive_NData	TCG_RCV_NDATA		5Bh
TRUSTED NODAT SEND	TCG_Send_NData			5Bh
TRUSTED RECEIVE	TCG_Receive	TCG_RCV		5Ch
TRUSTED RECEIVE DMA	TCG_Receive_DMA	TCG_RCV_DMA		5Dh
TRUSTED SEND	TDG_Send			5Eh
TRUSTED SEND DMA	TDG_Send_DMA			5Fh
WRITE BUFFER	WrBuf	WBUF		E8h
WRITE BUFFER DMA	WrBuf_DMA	WBUF_DMA		EBh
WRITE DMA	WrDMA	WDMA		CAh
WRITE DMA EXT	WrDMAEx	WDMX		35h
WRITE DMA FUA EXT	WrDMAFuaEx	WDFE		3Dh
WRITE DMA QUEUED	WrDMAQ	WDMQ		CCh
WRITE DMA QUEUED EXT	WrDMAQEx	WDQX		36h
WRITE DMA QUEUE FUA EXT	WrDMAQFuaEx	WDQF		3Eh
WRITE DMA WITHOUT RETRIES	WrDMAN	WDMAN		CBh
WRITE FPDMA QUEUED	WFPDMAQ	WDMA_NCO		61h
WRITE LOG DMA EXT	WrLogEx_DMA	WRLE_DMA		57h
WRITE LOG EXT	WrLogEx	WRLE		3Fh
WRITE LONG	WrLong	WTLG	WL	32h
WRITE LONG WITHOUT RETRIES	WrLongN	WTLGN	WLN	33h
WRITE MULTIPLE	WrMul	WMUL		C5h
WRITE MULTIPLE EXT	WrMulEx	WDME	WMEX	39h
WRITE MULTIPLE FUA EXT	WrMulFuaEx	WMFE		CEh
WRITE SECTOR(S)	WrSec	WDSK WSEC	WS	30h
WRITE SECTOR(S) EXT	WrSecEx	WDSE	WSEX	34h
WRITE SECTOR(S) WITHOUT RETRIES	WrSecN	WDSKN WSECN	WSN	30h

<b><i>ATA Command</i></b>	<b><i>Instruction</i></b>			<b><i>OP</i></b>
WRITE STREAM DMA EXT	WrStrDMA	WSTD		3Ah
WRITE STREAM ERROR LOG	WrStrErrLog	WSTE		2Fh
WRITE STREAM EXT	WrStrPIO	WSTP		3Bh
WRITE UNCORRECTABLE EXT	WUNCEX	WUNCX		45h
WRITE UNCORRECTABLE EXT_FL	WUNCEX_FL			45h
WRITE UNCORRECTABLE EXT_FNL	WUNCEX_FNL			45h
WRITE UNCORRECTABLE EXT_PL	WUNCEX_PL			45h
WRITE UNCORRECTABLE EXT_PNL	WUNCEX_PNL			45h
WRITE VERIFY	WrVerify	WV		3Ch